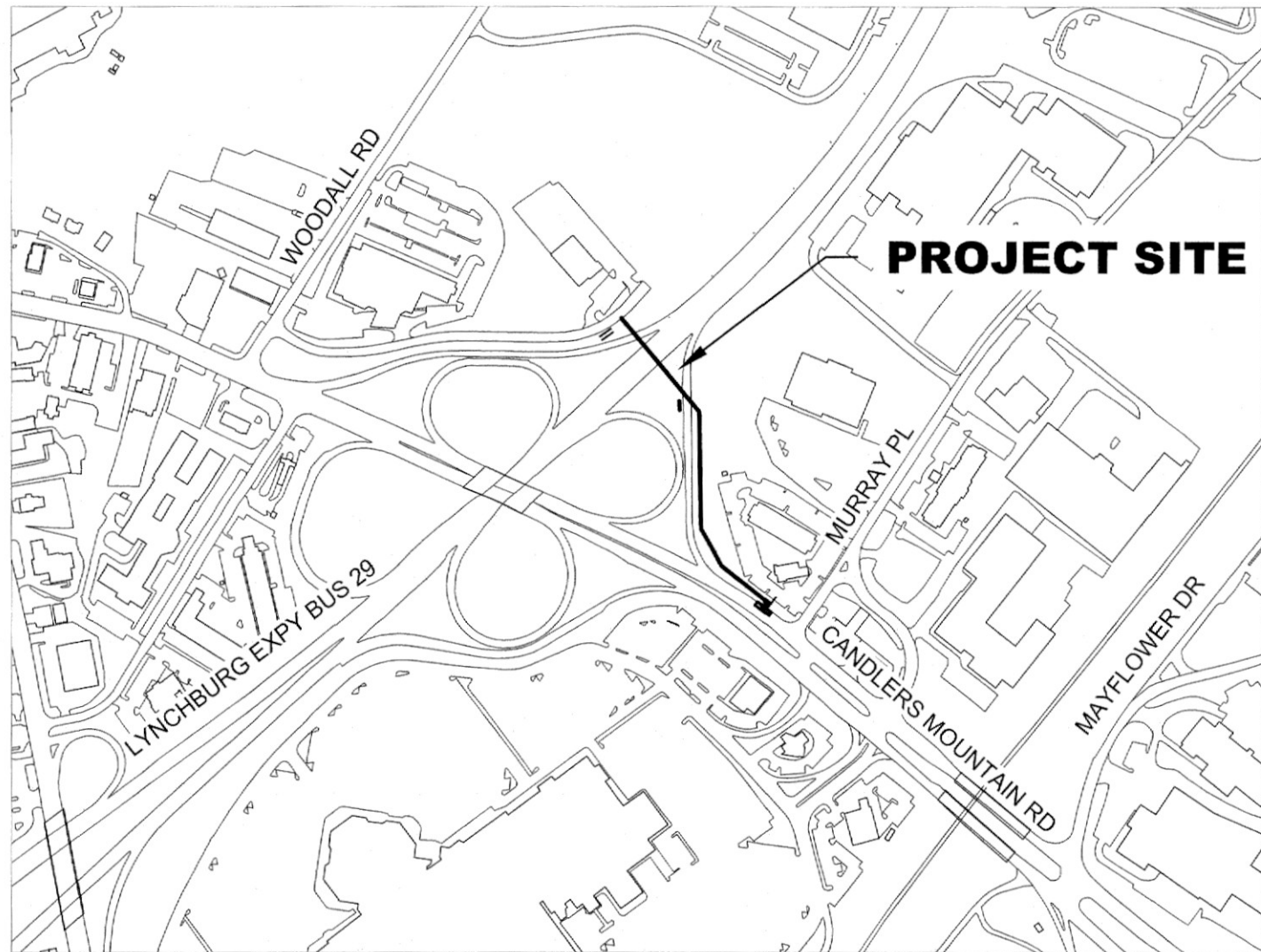


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CITY OF LYNCHBURG
DEPARTMENT OF WATER RESOURCES
CANDLERS MOUNTAIN ROAD
CONNECTOR WATERLINE DESIGN
LYNCHBURG, VIRGINIA
FEBRUARY 1, 2022
CITY OF LYNCHBURG PROJECT #18009-W



VICINITY MAP
NOT TO SCALE

1. WATER QUALITY IMPACTS - WORK INCLUDED IN THIS PROJECT DOES NOT INCREASE AMOUNTS OF IMPERVIOUS SURFACES. THE WORK WILL HAVE NO IMPACT ON WATER QUALITY.
2. STREAM CHANNEL PROTECTION - ALL GRADES AND SURFACES WILL BE RETURNED TO PRE-WORK CONDITIONS. THEREFORE, THERE WILL BE NO CHANGE TO RUNOFF QUANTITIES, RATE OF FLOW OR OTHER HYDRAULIC CONDITION.
3. FLOODING IMPACTS - THE WORK WILL HAVE NO IMPACT ON THE 10-YEAR PEAK RUNOFF RATE.
4. CONSTRUCTION SHALL BE SEQUENCED TO LIMIT THE DISTURBED AREA TO LESS THAN (1) ACRE. DISTURBED AREAS MUST BE STABILIZED IMMEDIATELY FOLLOWING THE COMPLETION OF WORK IN THAT AREA.
5. THE PROJECT DOES NOT SIGNIFICANTLY ALTER THE PREDEVELOPMENT RUNOFF CHARACTERISTICS OF THE LAND SURFACE AFTER THE COMPLETION OF CONSTRUCTION AND FINAL STABILIZATION.
6. THE PROJECT IS MANAGED SO THAT LESS THAN ONE (1) ACRE OF LAND DISTURBANCE OCCURS ON A DAILY BASIS.
7. THE ENVIRONMENT IS PROTECTED FROM EROSION AND SEDIMENTATION DAMAGE ASSOCIATED WITH THE LAND DISTURBING ACTIVITY.
8. THE OWNER AND/OR CONSTRUCTION ACTIVITY OPERATOR DESIGNS, INSTALLS, IMPLEMENTS, AND MAINTAINS POLLUTION PREVENTION MEASURES TO:
 - A. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS.
 - B. MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE, AND OTHER MATERIALS PRESENT ON-SITE TO PRECIPITATION AND TO STORMWATER.
 - C. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS AND IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND RESPONSE PROCEDURES.
 - D. PROHIBIT THE DISCHARGE OF WASTEWATER FROM THE WASHOUT OF CONCRETE.
 - E. PROHIBIT THE DISCHARGE OF WASTEWATER FROM THE WASHOUT AND CLEANOUT OF STUCCO, PAINT FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS.
 - F. PROHIBIT THE DISCHARGE OF FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE.
9. THE OWNER AND/OR CONSTRUCTION ACTIVITY OPERATOR PROVIDES REASONABLE ASSURANCE TO DEQ OR THE LOCAL VSMP AUTHORITY THAT ALL OF THE ABOVE CONDITIONS WILL BE SATISFIED. THIS MAY BE ACCOMPLISHED BY INCORPORATING THESE CONDITIONS INTO AN EROSION AND SEDIMENT CONTROL PLAN DEVELOPED FOR THE PROJECT.

EXISTING

- CONTROL POINT - NAIL SET
- STORM MANHOLE
- SANITARY MANHOLE
- POWER POLE
- LIGHT POLE
- FIRE HYDRANT
- TELEPHONE POLE
- TREE

- RAILROAD TRACKS
- EDGE OF PAVEMENT
- FENCELINE
- TREELINE
- OHT OVERHEAD TELEPHONE
- UGT UNDERGROUND NATURAL GAS
- OHE OVERHEAD ELECTRIC
- UGE UNDERGROUND ELECTRIC
- SS SANITARY LINE
- SD STORM LINE
- W WATER LINE
- PROPERTY LINE
- EDGE OF WATER
- SOIL DELINEATION

OWNER INFORMATION:

OWNER: CITY OF LYNCHBURG
CONTACT: SCOTT PARKINS, P.E.
UTILITIES ENGINEER
525 TAYLOR STREET
LYNCHBURG, VA 24501
PHONE: (434) 455-4248
EMAIL: scott.parkins@lynchburgva.gov

ENGINEER INFORMATION:

ENGINEER: WILEY|WILSON
127 NATIONWIDE DRIVE
LYNCHBURG, VA 24502
CONTACT: G. KEITH THOMPSON, PE
PHONE: (434) 455-3219
EMAIL: kthompson@wileywilson.com

PROJECT NAME & LOCATION:

CANDLERS MOUNTAIN ROAD CONNECTOR WATERLINE DESIGN
LYNCHBURG, VIRGINIA

IMPERVIOUS AREA STATISTICS

THE PLANNED IMPROVEMENTS WILL NOT CHANGE THE IMPERVIOUS COVER WITHIN THE PROJECT CORRIDOR.

PLANS ARE ACCEPTABLE TO VDOT

AGENT, VIRGINIA DEPARTMENT OF TRANSPORTATION
DATE: 4/7/22

LIST OF DRAWINGS

SHEET	TITLE
G-001	COVER SHEET
C-101	OVERALL SITE PLAN
C-102	PLAN AND PROFILE - STA. 10+00 TO STA. 15+00
C-103	PLAN AND PROFILE - STA. 15+00 TO STA. 20+33
C-401	E&S NARRATIVE
C-402	E&S DETAILS
C-501	DETAILS
C-502	DETAILS - MAINTENANCE OF TRAFFIC

GENERAL NOTES

1. QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY. PAYMENT SHALL BE MADE ACCORDING TO ACTUAL QUANTITIES AS MEASURED IN FIELD.
2. EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DEPTH PRIOR TO LAYING PIPE.
3. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE VDOT REPRESENTATIVE (DAVID HIX 434-841-6863) IN ACCORDANCE WITH MAINTENANCE OF TRAFFIC NOTES ON SHEET C-502 PRIOR TO COMMENCING WORK IN A VDOT RIGHT OF WAY.
4. THE CONTRACTOR SHALL CONTACT MISS UTILITY AND CITY'S CONSTRUCTION COORDINATOR AT LEAST 48 HOURS PRIOR TO EXCAVATION.
5. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT CITY OF LYNCHBURG MANUAL OF SPECIFICATIONS AND STANDARD DETAILS UNLESS SPECIFIED OR SHOWN DIFFERENTLY ON THE DRAWINGS OR SPECIFICATIONS. VDOT STANDARDS AND SPECIFICATIONS SUPERCEDE WITHIN THE RIGHT OF WAY AND SHALL COMPLY WITH THE 2020 VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS.
6. IN THE VDOT RIGHT OF WAY BACKFILLING AND COMPACTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2020 VDOT ROAD AND BRIDGE SPECIFICATION SECTION 302.03(A)2.G. A THIRD PARTY INSPECTION IS REQUIRED TO CONFIRM COMPLIANCE WITH THE SPECIFICATION.
7. THE CONTRACTOR SHALL BE FULLY LIABLE FOR ANY DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY CONSTRUCTION OPERATION AND SHALL RESTORE DAMAGED PROPERTY TO EXISTING OR BETTER CONDITION AT NO ADDITIONAL COST TO OWNER.
8. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND PROTECTED WITH EROSION CONTROL PRACTICES.
9. VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED FOR ALL DISTURBED AREAS IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS AND LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED BEFORE EXCAVATION BEGINS.
10. THE CONTRACTOR SHALL REPLACE ALL DISTURBED SURFACES IN KIND, INCLUDING PAVEMENT, STONE, DITCHES, MAILBOXES, SHRUBS, WALKS, ETC.
11. APP PROPERTY PINS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A CERTIFIED LAND SURVEYOR.
12. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CONFINED SPACE ENTRY REGULATIONS.
13. MAINTAIN OVERHEAD AND UNDERGROUND ELECTRICAL, TELEPHONE, AND GAS SERVICES AND ALL OTHER UNDERGROUND UTILITIES DURING ENTIRE CONSTRUCTION PERIOD. OUTAGES WILL NOT BE ALLOWED.
14. ALL DISTURBED AREAS THAT ARE NOT ASPHALT, GRAVEL, OR RIPRAP SHALL BE MULCHED AND SEEDED.

WATER LINE NOTES

1. PROPOSED WATER LINE SHALL BE CLASS 50 DUCTILE IRON AND SHALL MAINTAIN A MINIMUM COVER OF 36" UNLESS OTHERWISE INDICATED.
2. ALL FITTINGS REQUIRE ANCHOR BLOCKS AND RESTRAINED JOINTS AS DIRECTED BY ENGINEER.
3. PROJECT IS LOCATED IN THE 1005 PRESSURE ZONE.
STATIC PRESSURE VARIES FROM 75 P.S.I TO 150 P.S.I.
TEST PRESSURE = 225 P.S.I.
4. THE CITY (DEPARTMENT OF WATER RESOURCES) SHALL OPEN AND CLOSE ALL WATER LINE VALVES AS NEEDED FOR CONSTRUCTION UPON 48-HOUR NOTIFICATION FROM CONTRACTOR.
1. CONTACT THE CITY CONSTRUCTION COORDINATOR (HARRY BATEMAN 434-455-4267) AND MISS UTILITY 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY. CONTACT VDOT IN ACCORDANCE WITH THE MAINTENANCE OF TRAFFIC NOTES ON SHEET C-502 PRIOR TO ANY WORK IN THE RIGHT OF WAY.
2. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST EDITIONS OF THE 2020 VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, THE CITY OF LYNCHBURG MANUAL OF SPECIFICATIONS AND STANDARD DETAILS, THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, AND ANY OTHER STATE, FEDERAL, OR LOCAL REGULATIONS APPLICABLE. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS OR PLANS, THE MOST STRINGENT SHALL GOVERN.

CITY OF LYNCHBURG PROJECT #18009-W

"I HEREBY CERTIFY THAT, TO THE BEST OF MY ABILITY, THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE LATEST CITY OF LYNCHBURG MANUAL OF SPECIFICATIONS AND STANDARD DETAILS AND CITY CODE."

SIGNATURE: _____ REGISTRATION NUMBER: _____
PRINTED NAME AND TITLE: _____ DATE: _____

"I/WE HEREBY CERTIFY THAT ALL SITE CONSTRUCTION, DRAINAGE AND GRADING WILL BE DONE PURSUANT TO THIS PLAN AND THAT THE APPLICABLE STORMWATER MANAGEMENT CONDITIONS AND REQUIREMENTS OF THE CITY OF LYNCHBURG, THE COMMONWEALTH OF VIRGINIA AND THE FEDERAL GOVERNMENT AND ITS AGENCIES ARE HEREBY MADE PART OF THIS PLAN."

SIGNATURE: _____ TITLE: _____
PRINTED NAME: _____ DATE: _____

CITY ENGINEER: _____ DATE: _____
UTILITIES ENGINEER: _____ DATE: _____
ESC PLAN APPROVAL: _____ DATE: _____



CITY OF LYNCHBURG
CANDLERS MOUNTAIN ROAD
CONNECTOR WATERLINE DESIGN

REVISION DESCRIPTION

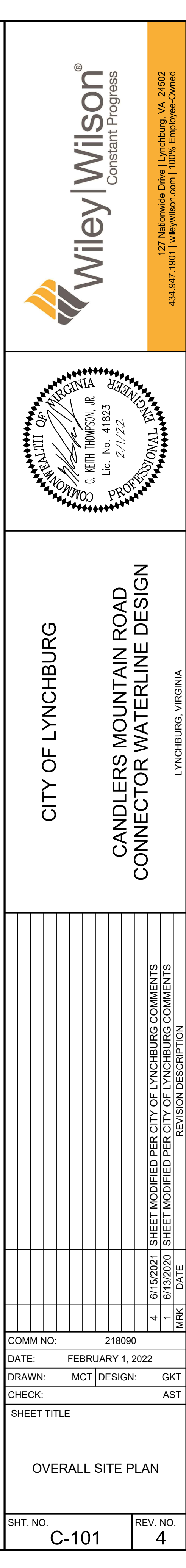
MRK DATE

COMM NO: 218090
DATE: FEBRUARY 1, 2022
DRAWN: MCT DESIGN: GKT
CHECK: AST
SHEET TITLE

COVER SHEET

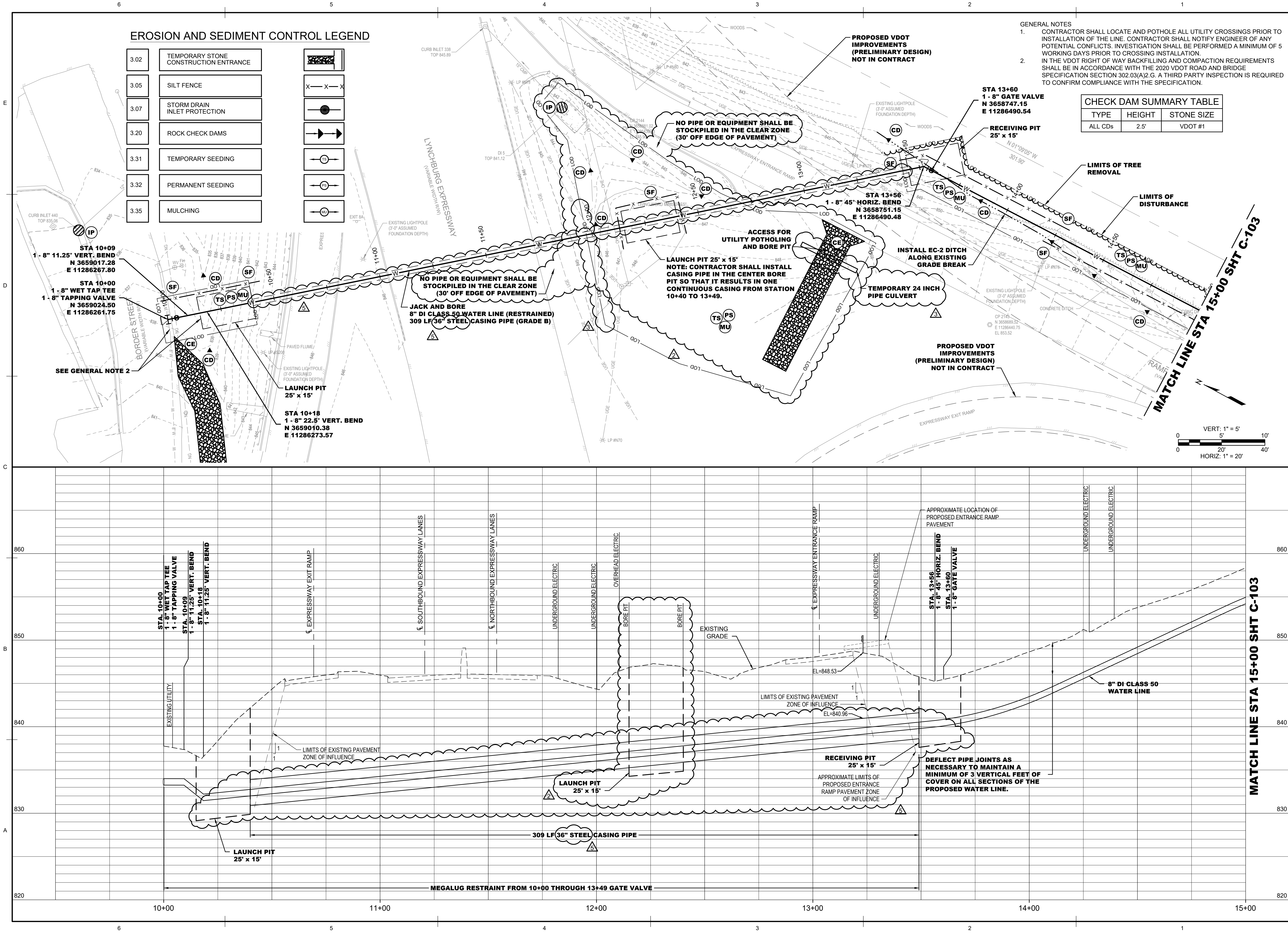
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CITY OF LYNCHBURG

CANDLERS MOUNTAIN ROAD CONNECTOR WATERLINE DESIGN

LYNCHBURG, VIRGINIA

COMM NO: 218090

DATE: FEBRUARY 1, 2022

DRAWN: MCT DESIGN: AST

CHECK: GKT

SHEET TITLE

PLAN AND PROFILE STA. 10+00 TO STA. 15+00

SHT. NO. C-102

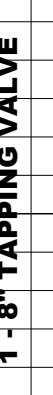
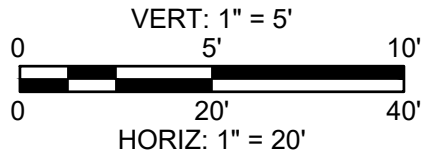
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COMMONWEALTH OF VIRGINIA
K. KATH THOMPSON, JR.
Lic. No. 41823
2/1/22
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	06/13/20	SHEET MODIFIED PER CITY OF LYNCHBURG COMMENTS
2	11/23/20	CITY REQUESTED MODIFICATION
3	12/01/20	CITY REQUESTED MODIFICATION
5	01/05/22	CITY REQUESTED MODIFICATION

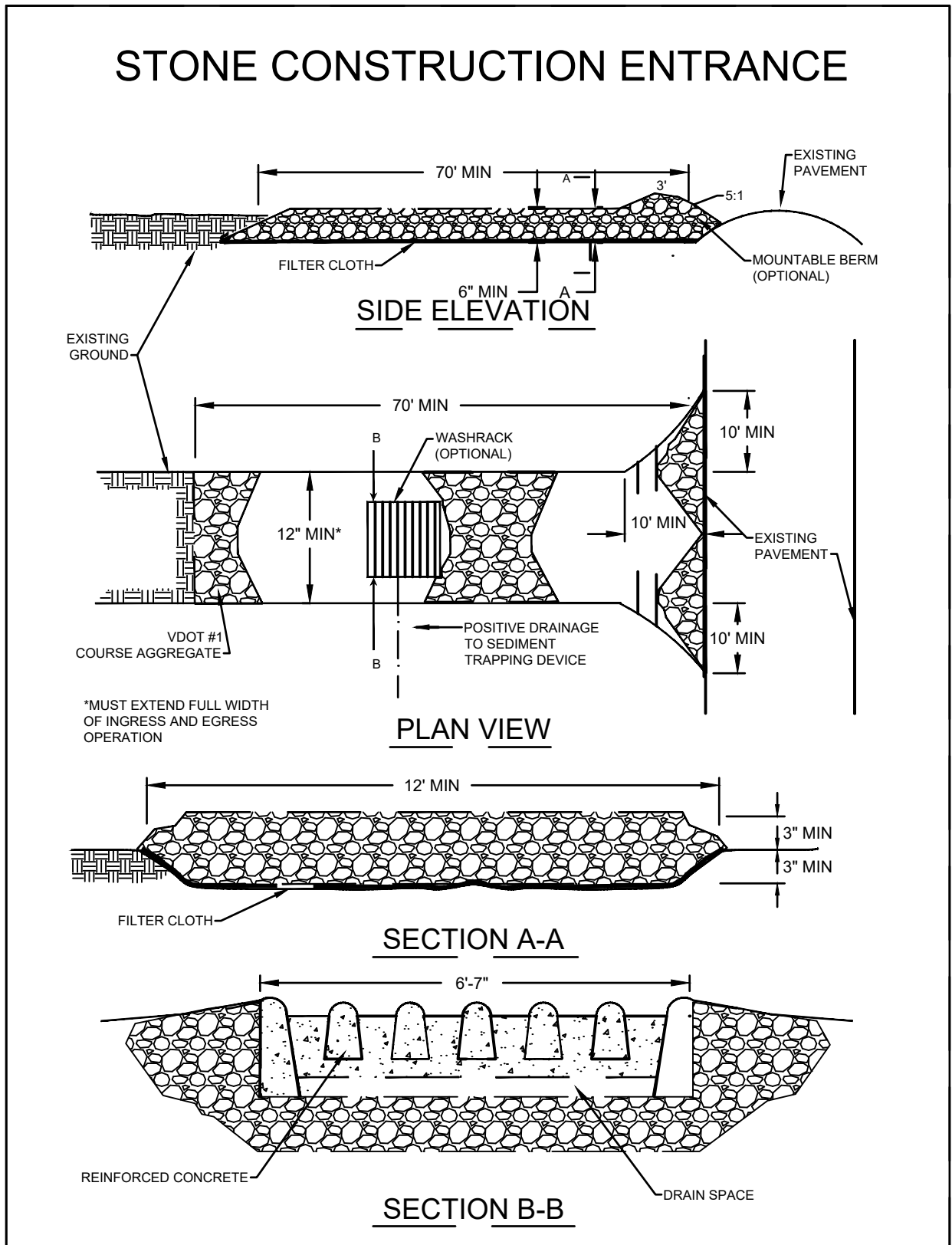


SHT. NO. C-103	REV. NO. 1
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E&S NARRATIVE	
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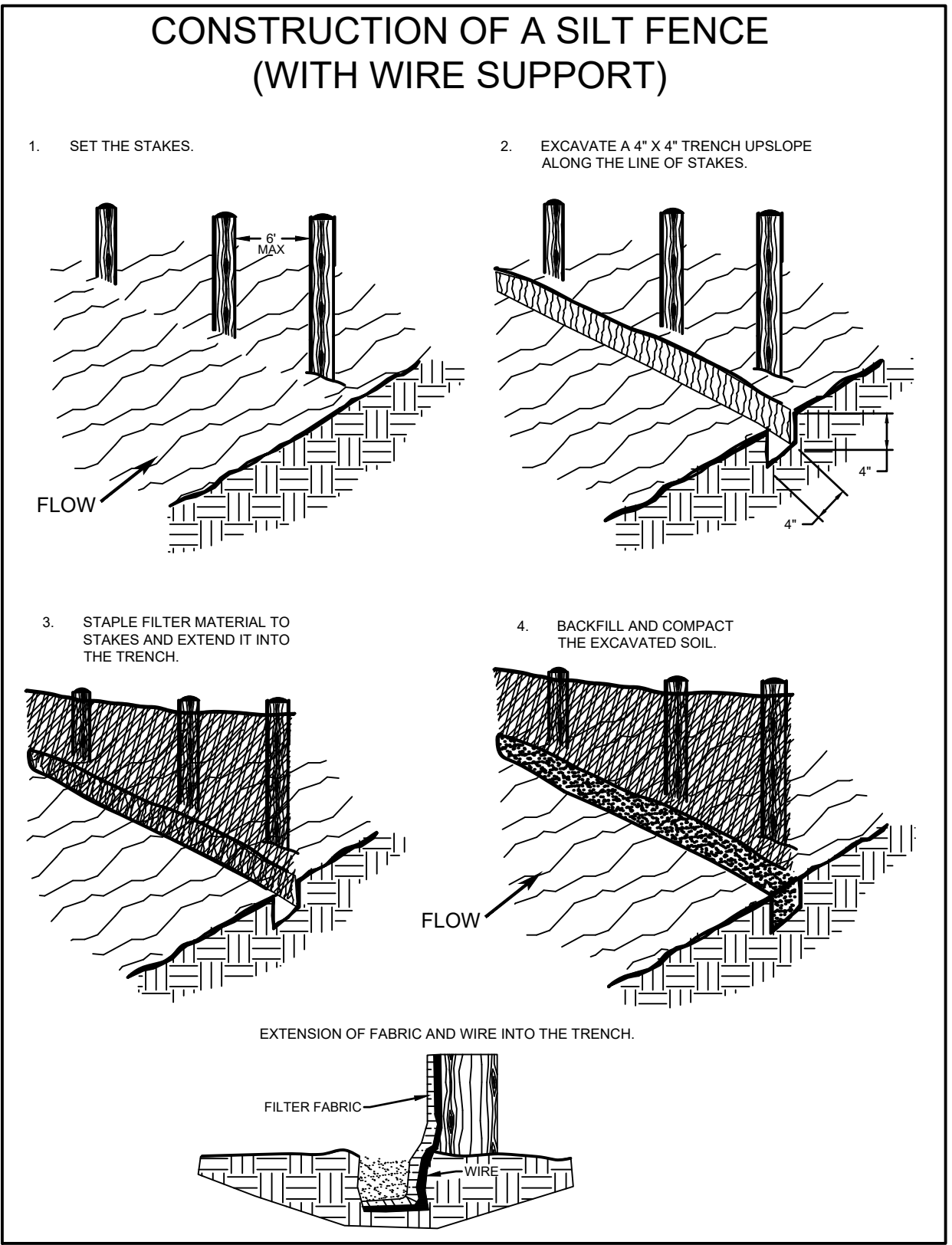
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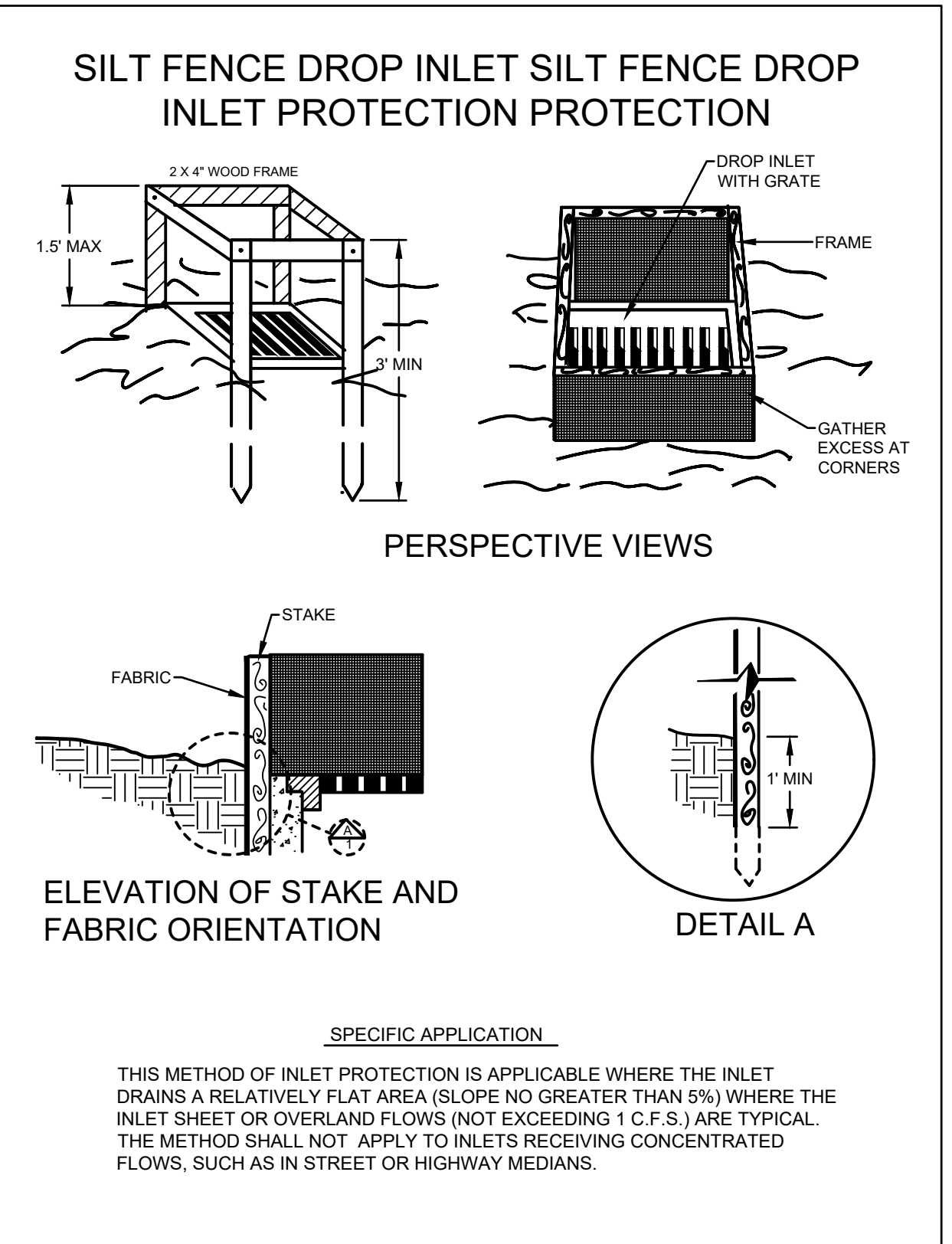
SOURCE: ADAPTED FROM 1983 Maryland Standards for Soil erosion and Sediment Control, and Va. DSWC

STONE CONSTRUCTION ENTRANCE
NOT TO SCALE PLATE 3.02-1 **CE**



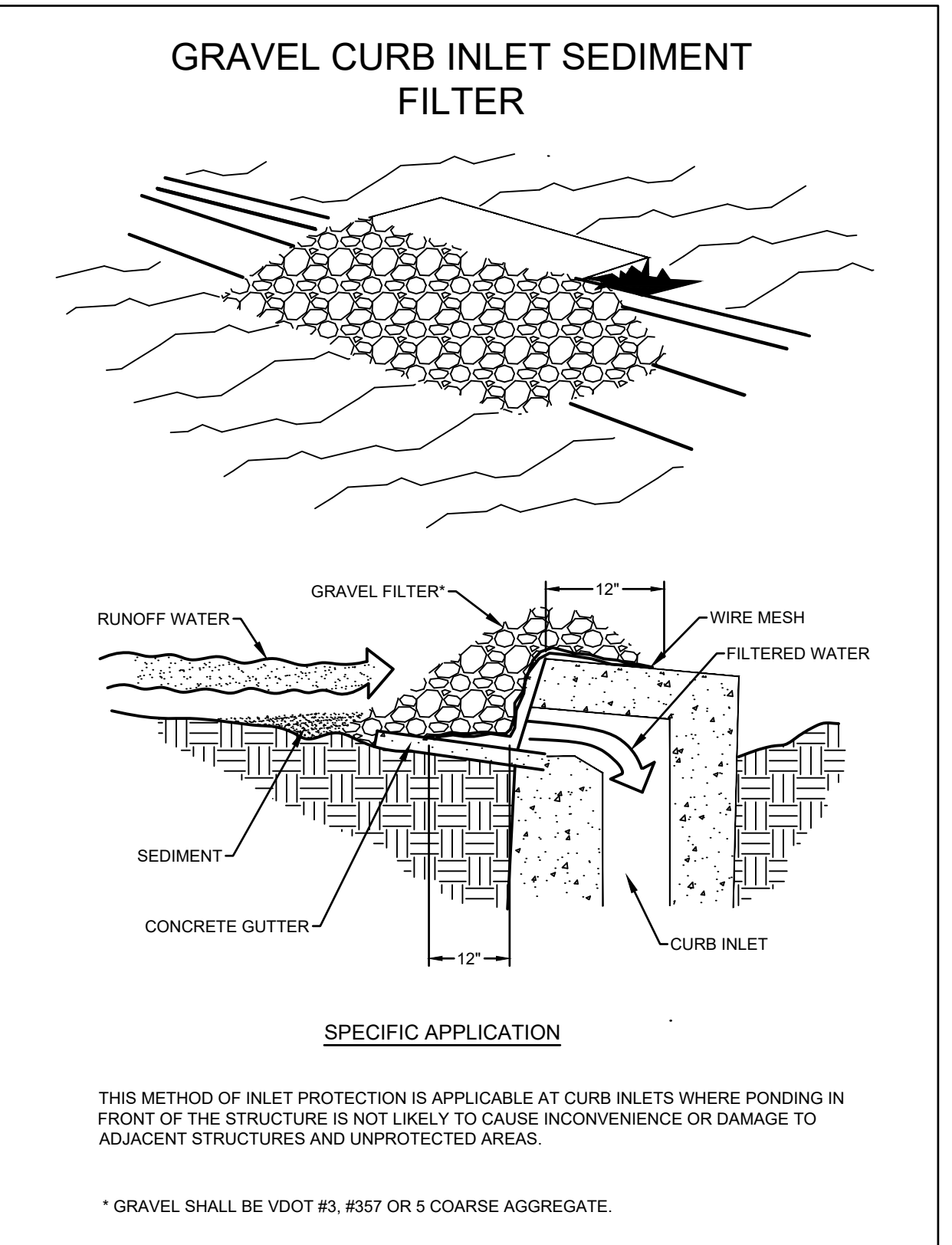
SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood & Wyant

SILT FENCE
NOT TO SCALE PLATE 3.05-1 **SF**



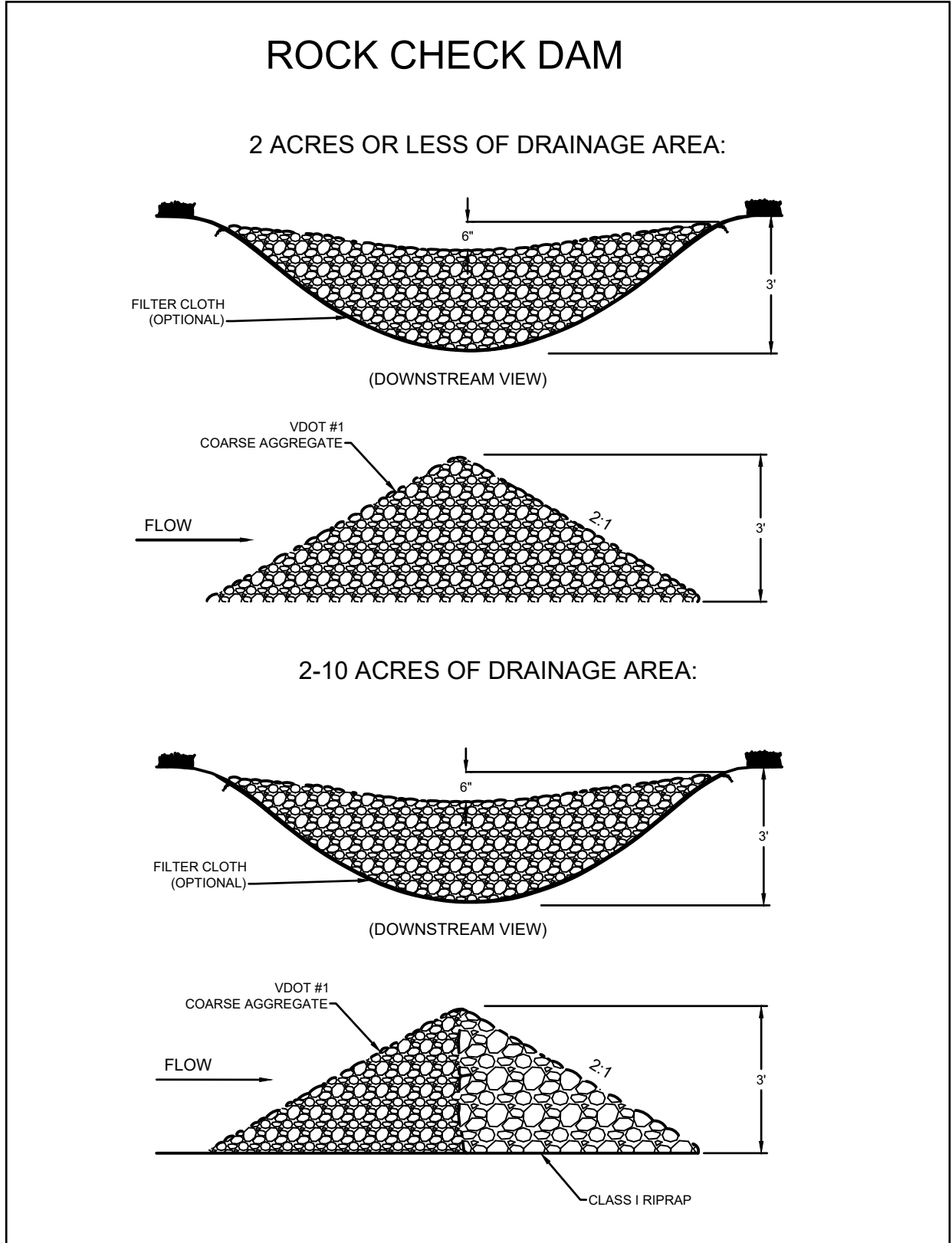
SOURCE: N.C. Erosion and Sediment Control Planning and Design Manual, 1988

STORM DRAIN INLET PROTECTION
NOT TO SCALE PLATE 3.07-1 **IP**



SOURCE: VA. DSWC

STORM DRAIN INLET PROTECTION
NOT TO SCALE PLATE 3.07-6 **IP**



SOURCE: VA. DSWC

ROCK CHECK DAMS
NOT TO SCALE PLATE 3.20-1 **CD**

1992 3.35

TABLE 3.35-A ORGANIC MULCH MATERIALS AND APPLICATION RATES			
MULCHES:	RATES:		NOTES:
	Per Acre	Per 1000 sq. ft.	
Straw or Hay	1½ - 2 tons (Minimum 2 tons for winter cover)	70 - 90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with mulch blower or by hand.
Fiber Mulch	Minimum 1500 lbs.	35 lbs.	Do not use as mulch for winter cover or during hot, dry periods.* Apply as slurry.
Corn Stalks	4 - 6 tons	185 - 275 lbs.	Cut or shredded in 4-6" lengths. Air-dried. Do not use in fine turf areas. Apply with mulch blower or by hand.
Wood Chips	4 - 6 tons	185 - 275 lbs.	Free of coarse matter. Air-dried. Treat with 12 lbs nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.
Bark Chips or Shredded Bark	50 - 70 cu. yds.	1-2 cu. yds.	Free of coarse matter. Air-dried. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.

* When fiber mulch is the only available mulch during periods when straw should be used, apply at a minimum rate of 2000 lbs./ac. or 45 lbs./1000 sq. ft.

Source: Va. DSWC

III - 353

ORGANIC MULCH MATERIALS AND APPLICATION RATES
NOT TO SCALE TABLE 3.35-A **MU**

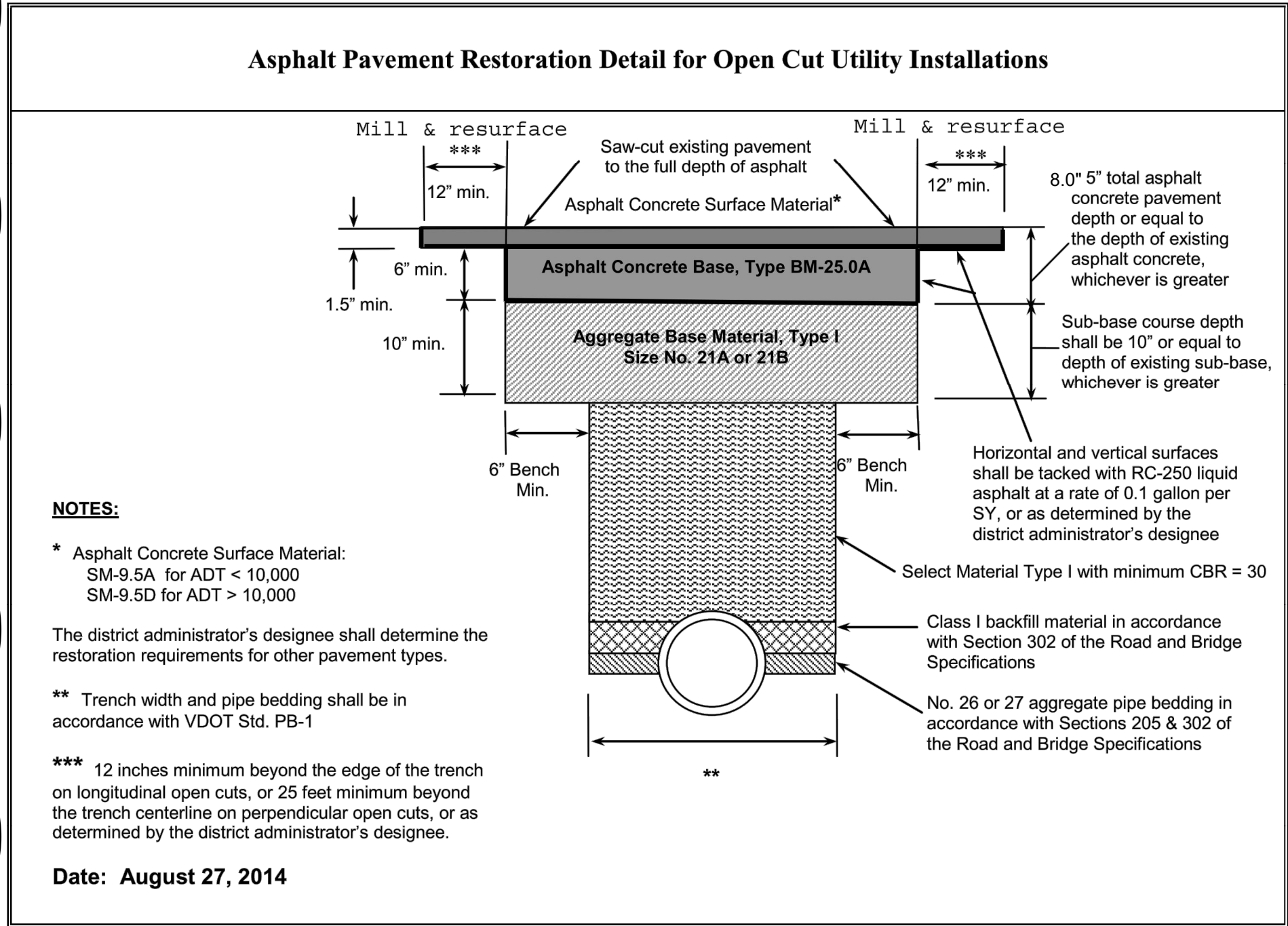
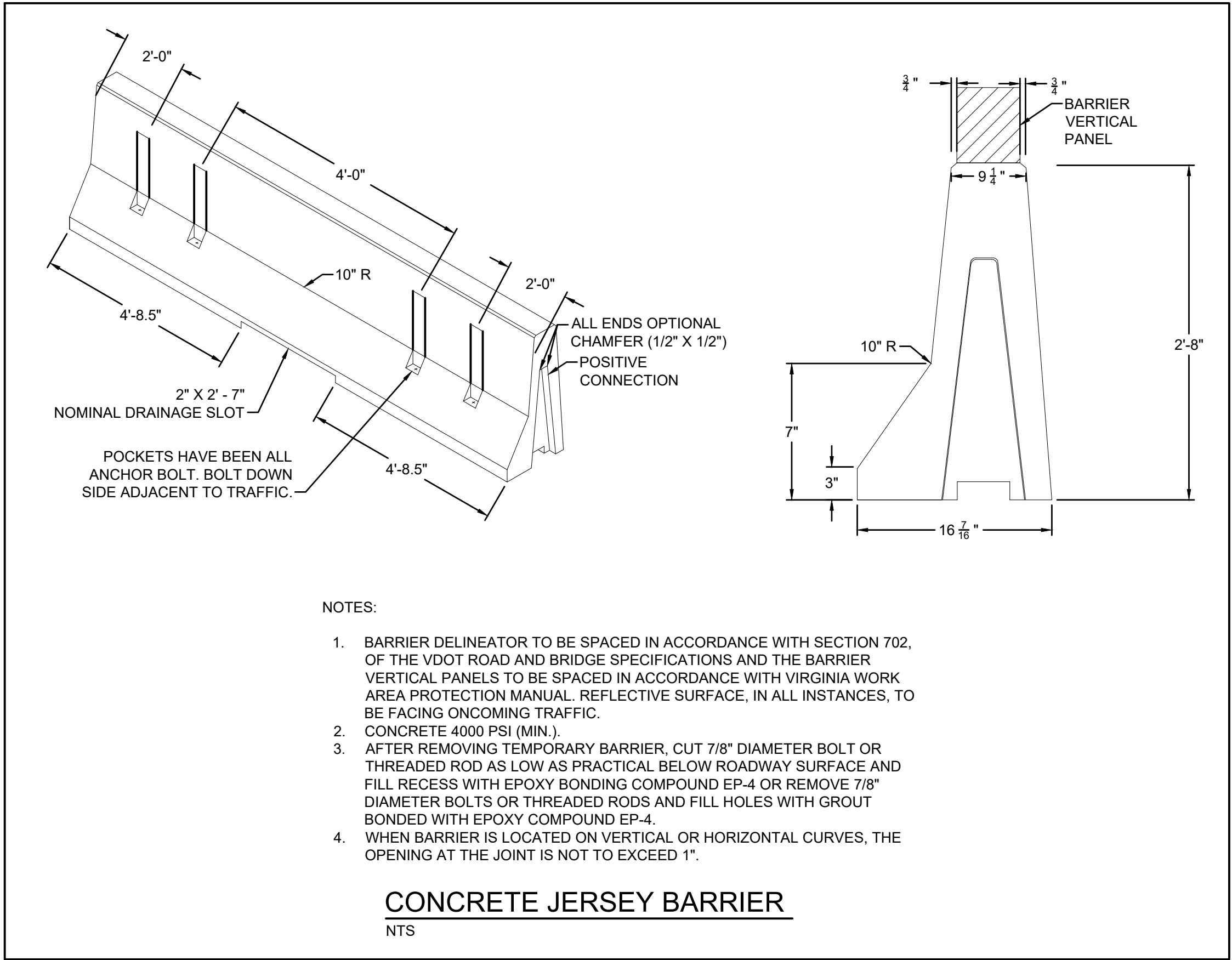
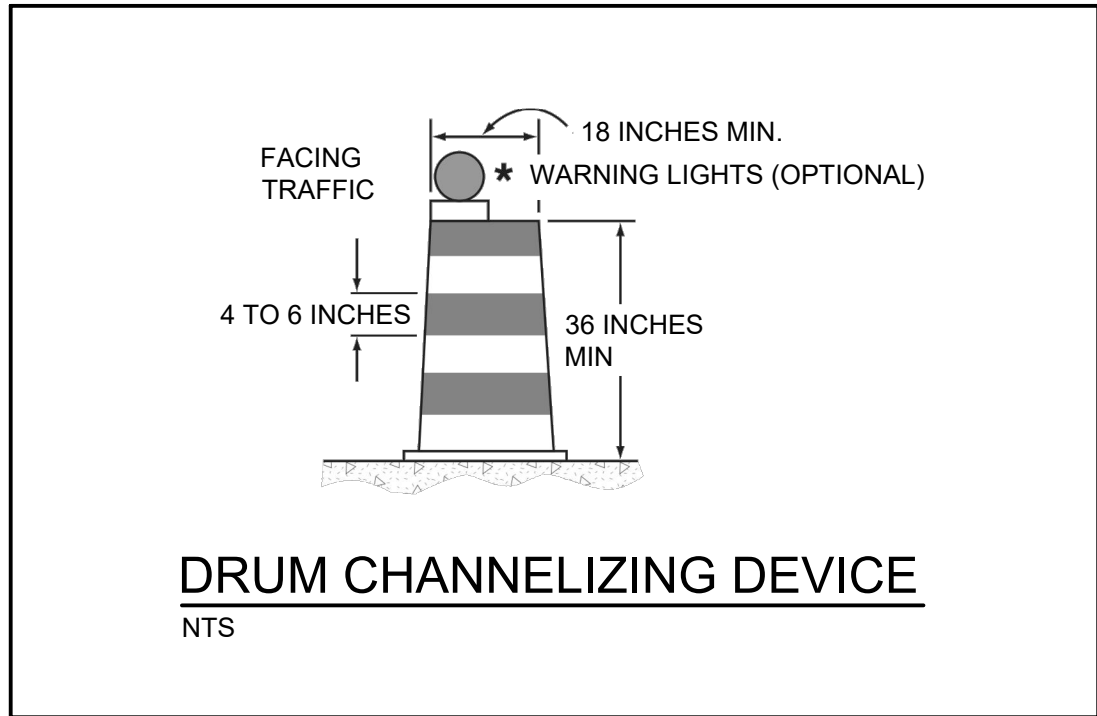
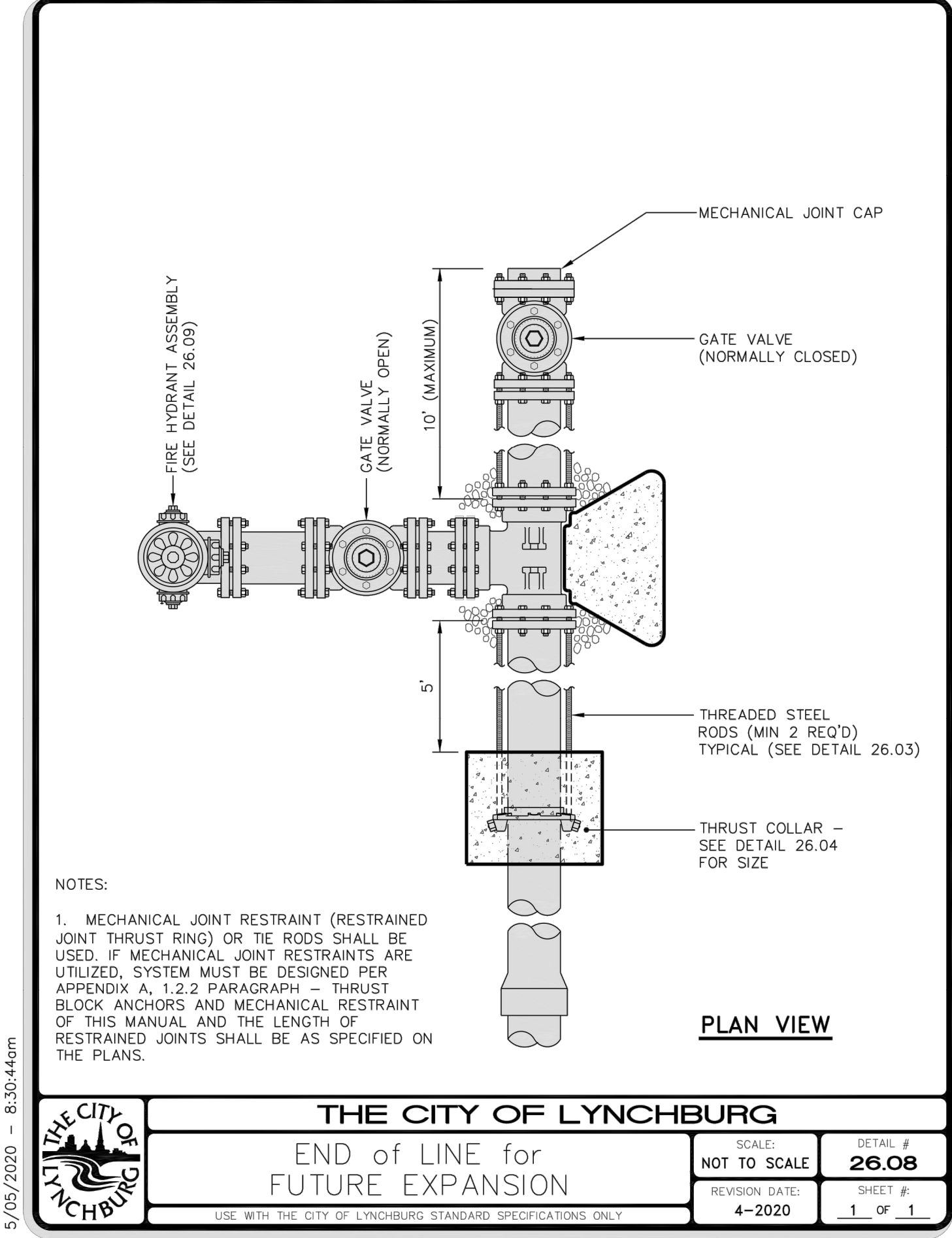
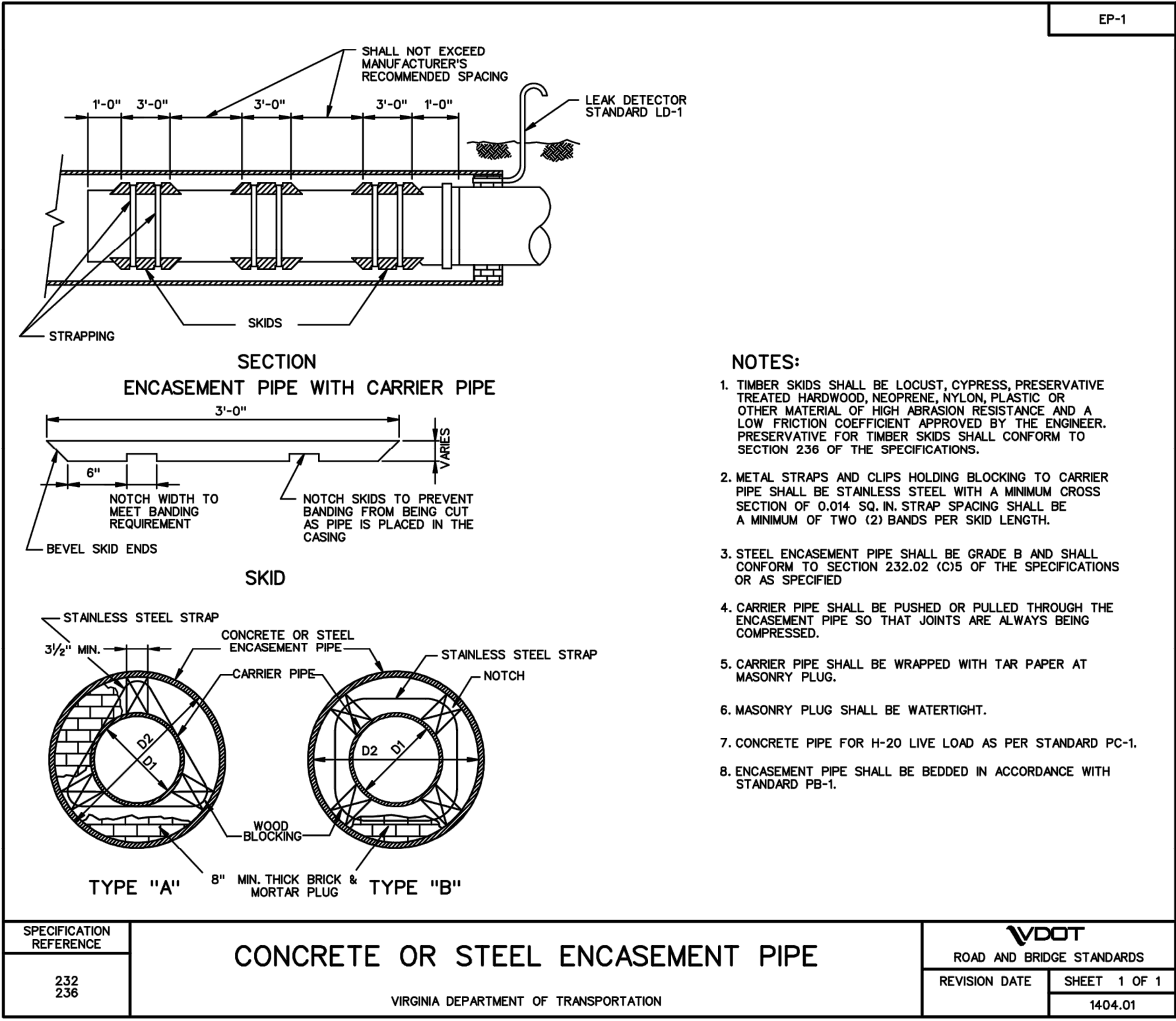
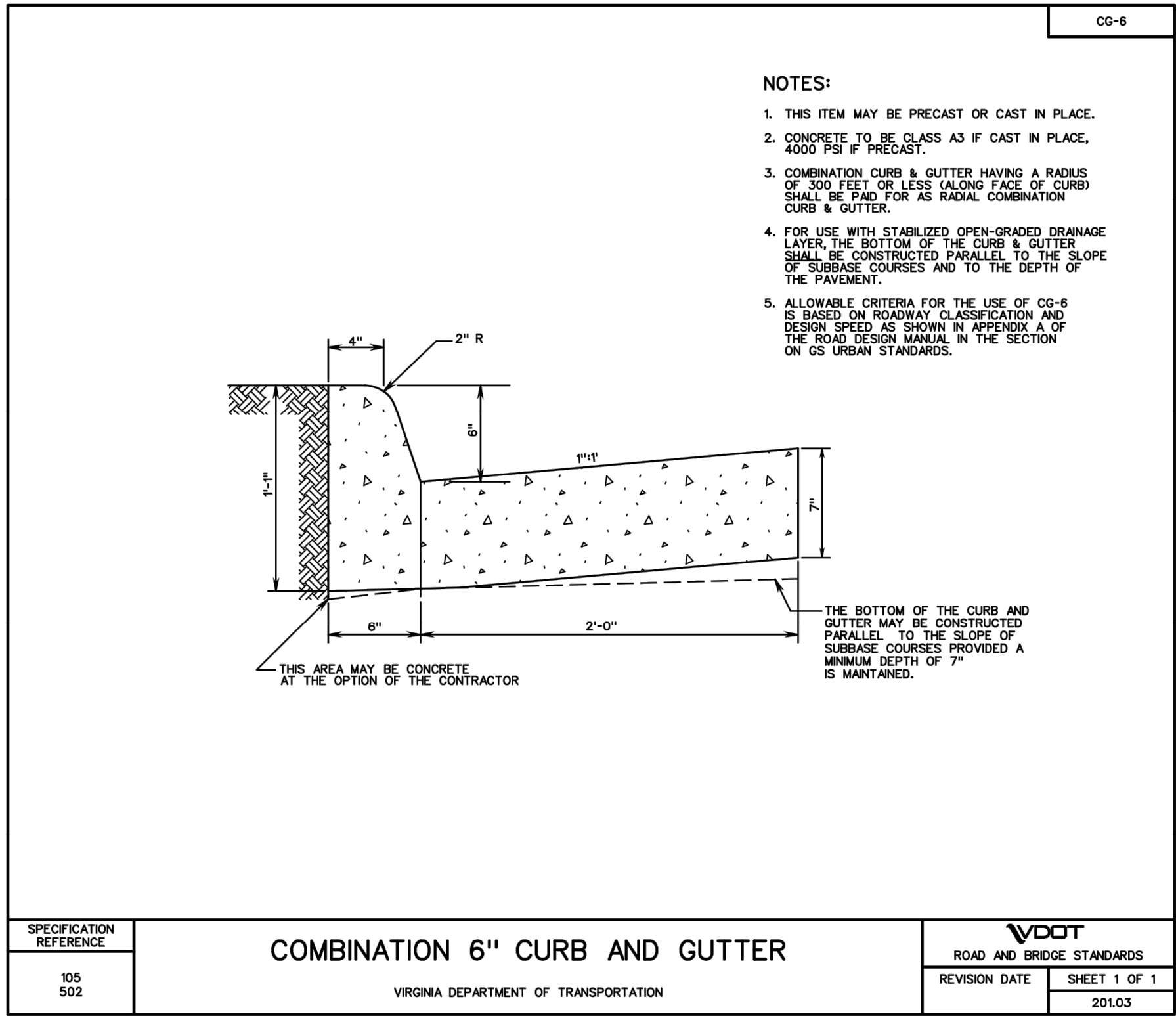
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COMM NO:	218090
DATE:	FEBRUARY 1, 2022
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COMMONWEALTH OF VIRGINIA
6. KETH THOMPSON, JR.
Lic. No. 41823
2/1/22
PROFESSIONAL ENGINEER

CITY OF LYNCHBURG

CANDLERS MOUNTAIN ROAD
CONNECTOR WATERLINE DESIGN

LYNCHBURG, VIRGINIA

NO.	DATE	DESCRIPTION
5	01/05/22	CITY REQUESTED MODIFICATION

COMM NO: 218090

DATE: FEBRUARY 1, 2022

DRAWN: MCT DESIGN: GKT

CHECK: AST

SHEET TITLE

DETAILS

SHT. NO. C-501 REV. NO. 5

12/26/2013 6:33 AM

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MAINTENANCE OF TRAFFIC NOTES:

- ALL WORK AFFECTING TRAFFIC SHALL ONLY BE ALLOWED BETWEEN THE HOURS OF 7:00PM AND 6:00AM .
ALTERNATIVE WORK HOURS SHALL BE APPROVED BY VDOT AND THE CITY OF LYNCHBURG PRIOR TO IMPLEMENTATION.
- TRENCHES IN WESTBOUND CANDLERS MOUNTAIN ROAD SHALL BE PLATED OR BACKFILLED BEFORE END OF EACH SHIFT UNLESS ADEQUATE BARRIERS ARE IN PLACE. WORK SHALL BE IN ACCORDANCE WITH 2016 VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS.
- TWO LANES OF TRAFFIC SHALL BE MAINTAINED ON WESTBOUND CANDLERS MOUNTAIN ROAD AT ALL TIMES.
- CONTRACTORS WORK ACTIVITIES MUST BE COORDINATED WITH CITY OF LYNCHBURG.
- CONTRACTOR SHALL NOTIFY SW REGION TRAFFIC OPERATIONS CENTER (540-375-0170) DAILY UPON ENTERING AND EXITING THE ROADWAY.
- CONTRACTOR SHALL CONTACT VDOT TRAFFIC ENGINEERING SECTION (JAMES HOLT - 434-856-8158) A MINIMUM OF 7 DAYS PRIOR TO COMMENCEMENT OF INSTALLATION ACTIVITIES WITHIN 1,000 FEET OF SIGNALIZED INTERSECTIONS, FLASHING SIGNS, OR OTHER VDOT ELECTRICAL FACILITIES PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL CONTACT VDOT LAND USE SECTION REPRESENTATIVE (DAVID HIX - 434-841-6863) PRIOR TO COMMENCING WORK WITHIN VDOT RIGHT-OF-WAY.
- CONTRACTOR SHALL COMPLY WITH VIRGINIA WORK AREA PROTECTION MANUAL 2011 EDITION, REVISION 2.1 NOVEMBER 1, 2020 WHEN FACILITATING MAINTENANCE OF TRAFFIC.
- CHANNELIZING DEVICES SHALL BE PLACED IN CONFORMANCE WITH VIRGINIA WORK AREA PROTECTION MANUAL. 20 LF SPACING BETWEEN DEVICES WITHIN TAPERS, AND 40 LF IN TANGENT SEGMENTS.
- TYPE A WARNING LIGHTS SHALL BE PLACED IN CONFORMANCE WITH VIRGINIA WORK AREA PROTECTION MANUAL. MOUNT ON CHANNELIZING DEVICES WITH A MINIMUM MOUNTING HEIGHT OF 30 INCHES TO THE BOTTOM OF THE LENS.
- JERSEY BARRIER SHALL BE PLACED IN CONFORMANCE WITH VIRGINIA WORK AREA PROTECTION MANUAL. FLARE UNTIL THE END IS OUTSIDE THE ACCEPTABLE CLEAR ZONE. A TYPE A FLASHING LIGHT SHALL BE INSTALLED ON THE BARRIER AT THE BREAKPOINT WHERE THE TRANSITION OR TAPER ENDS AND THE BARRIER BECOMES PARALLEL TO THE ROADWAY.

WATERLINE CONSTRUCTION NOTES:

- ALL WORK AFFECTING TRAFFIC SHALL ONLY BE ALLOWED BETWEEN THE HOURS OF 7:00PM AND 6:00AM. ALTERNATIVE WORK HOURS SHALL BE APPROVED BY VDOT AND THE CITY OF LYNCHBURG PRIOR TO IMPLEMENTATION.



SIZE: 48" x 48"
W20-1



SIZE: 48" x 48"
W20-V13R



SIZE: 48" x 24"
G20-2



SIZE: 48" x 48"
W21-5bL



SIZE: 48" x 48"
W20-5R



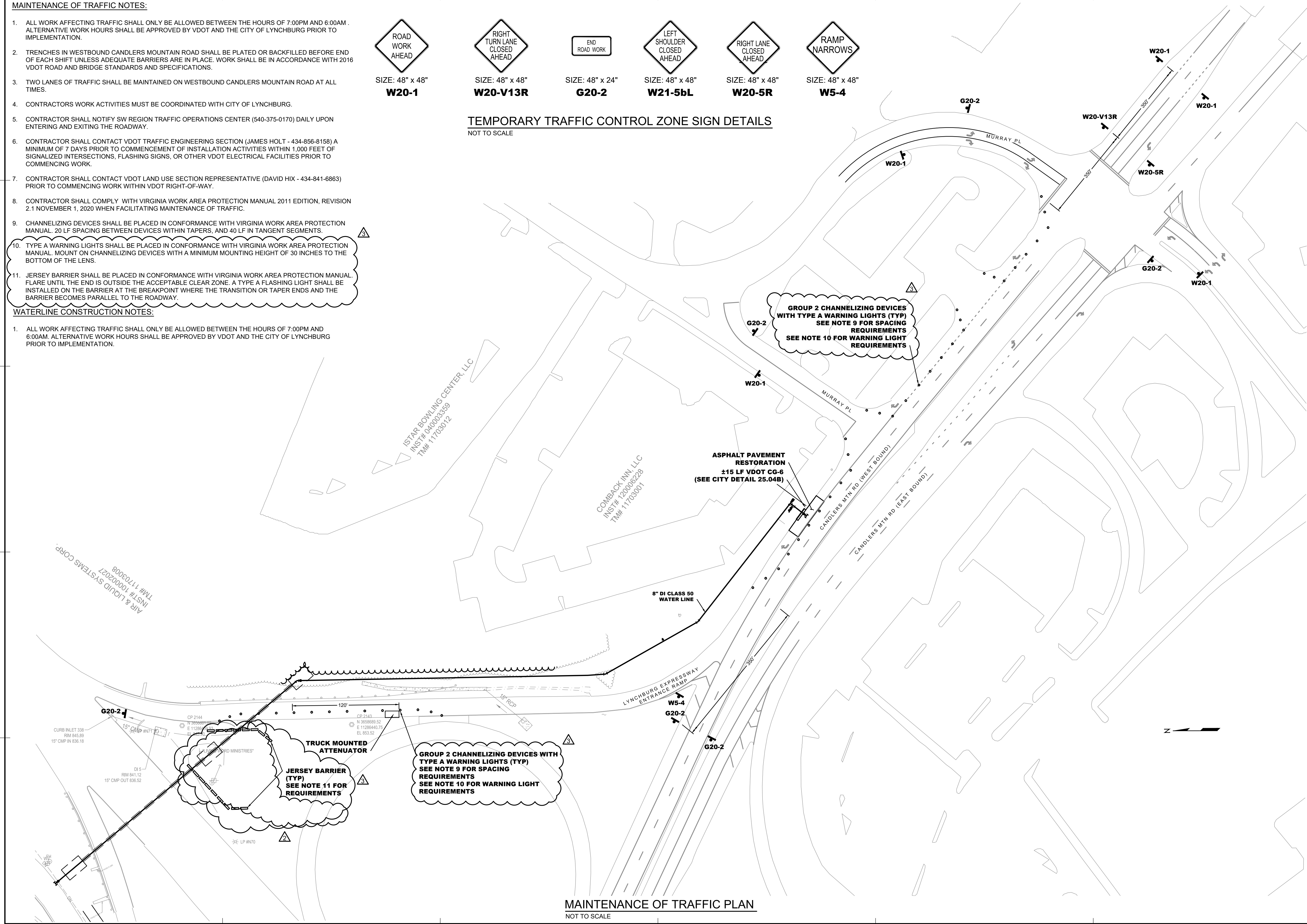
SIZE: 48" x 48"
W5-4

TEMPORARY TRAFFIC CONTROL ZONE SIGN DETAILS

NOT TO SCALE

MAINTENANCE OF TRAFFIC PLAN

NOT TO SCALE



CITY OF LYNCHBURG

CANDLERS MOUNTAIN ROAD
CONNECTOR WATERLINE DESIGN

LYNCHBURG, VIRGINIA

REV	DATE	REVISION DESCRIPTION
1		
2		
3	12/01/20	CITY REQUESTED MODIFICATION
4	11/23/20	CITY REQUESTED MODIFICATION

COMM NO: 218090
DATE: FEBRUARY 1, 2022
DRAWN: MCT DESIGN: GKT
CHECK: AST

SHEET TITLE

DETAILS
MAINTENANCE
OF TRAFFIC

SHT. NO. C-502 REV. NO. 3